

Date: Wednesday, 12/11/2008 1:38:20 PM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: HINGE BRACKET
Job Number	: 43363		
Estimate Number	: 10347		
P.O. Number	:	Part Number	: D28572
This Issue	: 12/11/2008 S.O. No. :	Drawing Number	: D2857 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 11 Type : MACHINED PARTS	Drawing Revision	: B
Previous Run	: 39786	Material	:
Written By	:	Due Date	: 28/11/2008
Checked & Approved By	: <u>JUD 08.11.12</u>	Qty:	20 Um: Each
Comment	: Est C 00.06.22 Removed P/O for powder coat EC Est D 06.03.30 Added level 8 EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6B2000X01250	6061-T6 Bar 2.00 x 1.25
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Comment: Qty.: 0.4594 f(s)/Unit Total : 4.5938 f(s)
 Material: 2.00" X 1.25"
 6061-T6 (QQ-A-225/8 or QQ-A-250/11 or QQ-A-200/8)
 (M6061T6B200001250)
 Batch M109223

mk 08/11/13

(22)

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW
 Cut blanks 5.2"

mk 08/11/13

(22)

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1
 1-Machine per folio D2857-2
 2-Deburr any rough edges

J.F. 08/11/15

(21)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 08/11/15

(21)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

See PAR-024

Part No: D2857-2 PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: NA Date: 08-11-24

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>43363</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/11/16	3.0	Dimension .147" is .130" on one parts R.C. PROGRAM was run at φ. PAR: 08-024	<i>[Signature]</i>	- adjust program. - scrap and destroyed Qty 1 AND replace Bk M109223	J.F. 08/11/16 <i>[Signature]</i>	S 08/11/16 <i>[Signature]</i>	<i>[Signature]</i>	S 08/11/17 <i>[Signature]</i>

NOTE: Date & initial all entries

Date: Wednesday, 12/11/2008 1:38:20 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HINGE BRACKET

Job Number: 43363

Part Number: D28572

Job Number:



Seq. #: Machine Or Operation: Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

26 08/11/17

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.3

FD 08/11/18 (22)

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

M-1 08/11/18 (22X)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) per Dart QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

10:30
3200°
11:00

M-1 08/11/18

(22X)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

FD 08/11/18 (22)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST 51

AS 08/11/20 (22)

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/11/21

Job Completion



M-1 08-11-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 43363
Description: Hinge Bracket		Part Number: D2857-2
Inspection Dwg: D2857	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

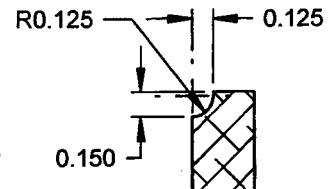
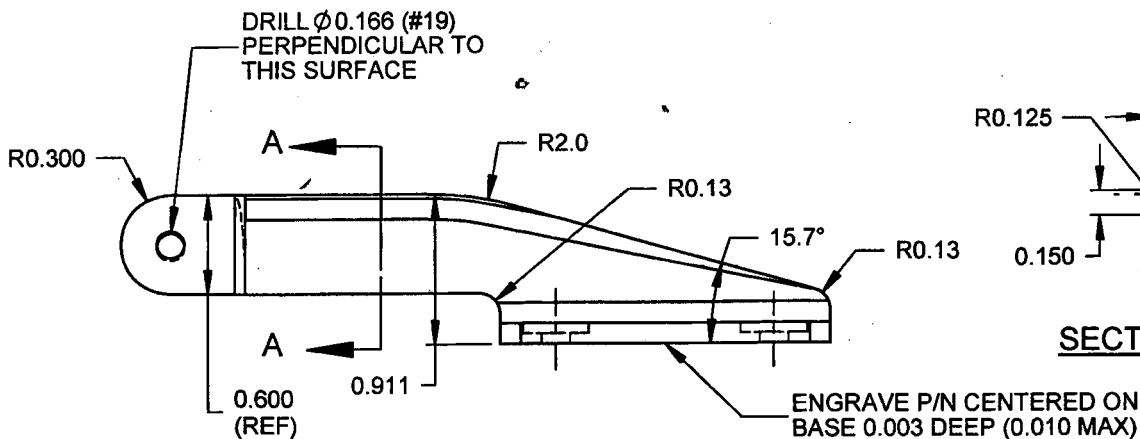
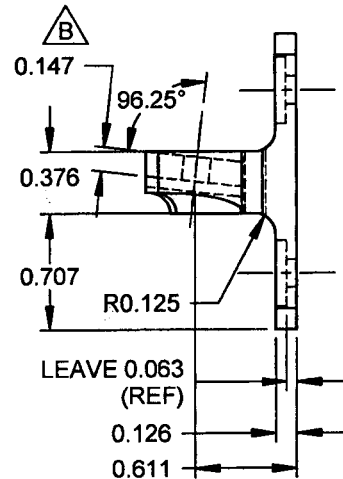
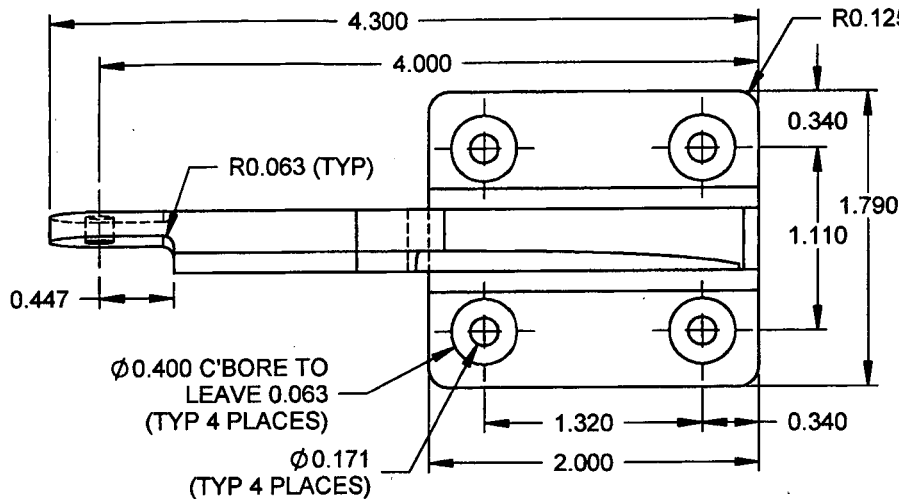
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.300	+/-0.010	4.309"	✓			
4.000	+/-0.010	4.003"	✓			
0.340	+/-0.010	.340"	✓			
1.110	+/-0.005	1.110"	✓			
1.790	+/-0.010	1.790"	✓			
1.320	+/-0.005	1.320"	✓			
2.000	+/-0.010	2.001"	✓			
0.340	+/-0.010	.340"	✓			
0.447	+/-0.010	.446"	✓			
Ø0.171	+0.005/-0.000	Ø.173"	✓			
0.147	+/-0.010	.147"	✓			
0.376	+/-0.010	.378"	✓			
0.126	+/-0.010	.126"	✓			
0.063	+/-0.010	.062"	✓			
Ø0.166	+0.005/-0.000	Ø.166"	✓			
0.911	+/-0.010	.915"	✓			
0.600	+/-0.010	.603"	✓			
0.125	+/-0.010	.128"	✓			
0.150	+/-0.010	.149"	✓			

Measured by: J.F.	Audited by: 124	Prototype Approval:	N/A
Date: 08/11/15	Date: 08/11/17	Date:	N/A

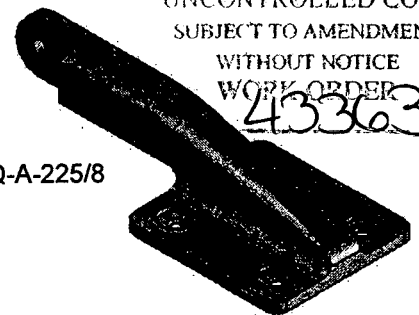
Rev	Date	Change	Revised by	Approved
A	04.06.15	New Issue	KJ/JLM	
B	07.04.20	Dimensions update per Dwg Rev B	KJ/JLM	

DART

DESIGN KE	DRAWN BY <i>LE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2857	REV. B SHEET 1 OF 1
DATE 06.08.28	TITLE HINGE BRACKET		SCALE 1:1
REV	DATE	DESCRIPTION	
A	98.12.14	NEW ISSUE	
B	06.08.28	ADD THICKNESS, REDRAW W/ SOLIDWORKS	

RELEASED
06-10-13**SECTION A-A****D2857-1 HINGE BRACKET**
D2857-2 OPPOSITE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

**NOTES:**

- 1) MATERIAL: 6061-T6 ALUMINUM BAR PER QQ-A-250/11 OR QQ-A-200/8 OR QQ-A-225/8 (REF DART SPEC M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX

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N59 Z0.585
N60 G1 Z0.185 F15.0
N61 X1.
N62 X1.7134 F12.0
N63 X2.0951 Y1.52 F22.0
N64 X2.2073
N65 Y2.093
N66 Y2.243 F15.0
N67 G0 Z3.
N68 G1 G40
N69 (FACE HOLE SECTION BACK TOP)
N70 (T14 1/2-1/16 RAD BULL)
N71 G0 G49 G90 Z0
N72 G56 X2.2073 Y-2.3834 A96.247
N73 G43 Z3. H14 M8
N74 G0 Z0.2029
N75 G1 Z-0.0471 F15.0
N76 Y-2.1084
N77 Y-1.5354
N78 X1.8948 F22.0
N79 Y-2.1084
N80 Y-2.2584 F15.0
N81 G0 Z3.
N82 G1 G40
N83 (CONTOURV LONG SECTION TOP)
N84 (T15 1" END 0.4 DEEP)
N85 G0 G49 Z0 M9
N86 T15 M6
N87 G0 G90 G56 X6.7334 Y-2.4168 A90. M3 S1500
N88 G43 Z3. H15 M8
N89 G4 P2000
N90 G0 Z0.062
N91 G1 Z-0.288 F15.0
N92 G3 X6.0548 Y-2.0366 I-0.5294 J-0.1492
N93 G1 X4.2522 Y-2.5447
N94 G2 X3.5743 Y-2.6384 I-0.6782 J2.4063
N95 G1 X1.9109 Y-2.6404
N96 G3 X1.7611 Y-2.7905 I0.0002 J-0.15
N97 G0 Z3.
N98 G1 G40
N99 (FINISH CONTOUR LONG SECTION TOP)
N100 (T8 1/2 END CARB)
N101 G0 G49 Z0 M9
N102 T8 M6
N103 G0 G90 G56 X5.8037 Y2.1593 A-90. M3 S3200
N104 G43 Z3. H8 M8
N105 G4 P2000
N106 G0 Z0.438
N107 G1 Z-0.012 F15.0
N108 G3 X5.9938 Y1.82 I0.2647 J-0.0746
N109 G2 X6.2853 Y1.435 I-0.1085 J-0.385 F22.0
N110 G0 Z3.
N111 G1 G40
N112 G0 X5.8037 Y2.1593
N113 Z0.238
N114 G1 Z-0.212 F15.0
N115 G3 X5.9938 Y1.82 I0.2647 J-0.0746
N116 G2 X6.2853 Y1.435 I-0.1085 J-0.385 F22.0
N117 G0 Z3.
N118 G1 G40
N119 (CENTER DRILL)

0112

N59 Z0.585
N60 G1 Z0.185 F15.0
N61 X1.
N62 X1.7134 F12.0
N63 X2.0951 Y1.52 F22.0
N64 X2.2073
N65 Y2.093
N66 Y2.243 F15.0
N67 G0 Z3.
N68 G1 G40
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N114 G1 Z-0.196 F15.0
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N116 G2 X6.2853 Y1.435 I-0.1085 J-0.385 F22.0
N117 G0 Z3.
N118 G1 G40
N119 (CENTER DRILL)

New